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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			EXAMINER MISLEH, JUSTIN P	
			ART UNIT 2622	PAPER NUMBER
			NOTIFICATION DATE 02/26/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/853,197

Applicant(s)

INAGAKI, ATSUSHI

Examiner

Justin P. Misleh

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-9,11,12,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7-9,11,12,14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed November 29, 2007 have been fully considered but they are not persuasive.
2. Applicant admits, "Misawa employs two modes of reading the image signal, namely a normal mode and a macro mode with the latter being operative when an external display device is attached to the video output terminal (41). Misawa further teaches that in the normal mode of operation the imaging device (28) is driven by reading signals from 1/4 or 1/8 of the photoelectric elements (i.e. pixels) whereas in the macro mode of operation signals are read from 1/2 or all of the photoelectric elements. [Misawa, Col. 9, lns. 23-35 and 53-57]." (see Remarks section, page 10).
3. However, Applicant subsequently argues, "However, Misawa's two reading modes merely involve changes in how many pixels are skipped between successive reads (e.g., the pixel skip- readout rate) as shown, for example, by Figs. 2 and 4 of Misawa ... Misawa's reading modes do not change the image sensing area from which the image signal is read based upon the image display ON/OFF state as disclosed by Applicant." (see Remarks section, page 11).
4. The Examiner respectfully disagrees with Applicant's position. The "image sensing area" can only correspond to the image signal that is transferred to the CPU (processor) for further processing. In the specification of the present application, on page 23 (line 7) – page 24 (line 18) and as shown in figures 6 and 7, the "image sensing area" corresponds to the image signals which are actually read out from the sensor and kept for processing. The signals at the

top (i.e., before) and bottom (i.e., after) the reading area are swept out and discarded. Even though light impinges upon the entire image sensor, only the signals that are kept for further processing are part of the image sensing area. Similarly, in Misawa, as shown in figures 1 – 4 and as stated in column 6 (lines 35 – 41), it is only the signals which are kept that are sent for further processing.

5. Therefore, the size of the “image sensing area” for the “first image sensing area” and the “second image sensing area” can only be compared by using the signals that are kept for further processing. In the case of the macro-imaging mode, Misawa keeps all of the signals or at least 1/2 of the signals (via line-skipping) output from the CCD (see figures 1 and 2 and column 8, lines 28 – 44). In the case of the normal-imaging mode, Misawa keep only 1/4 or 1/8 of the signals (again via line-skipping) output from the CCD (see figures 3 and 4 and column 7, lines 55 – 64). Thus, the image sensing area in the macro-imaging mode is always larger than the image sensing area of the normal-imaging mode.

6. Furthermore, the claim language simply states, “a display designating unit that determines whether an image display device is in an image display ON state, or said image display device is in an image display OFF state”. As indicated in the Non-Final Office Action (mailed August 30, 2007), this claim language does not necessarily require that no power is provided/accepted to/by the display device in an image display OFF state and that power must be provided/accepted to/by the display device in an image display ON state. While the claim language requires that the image display device displays an image when the display device is in the image display ON state, the claim language does not specify what happens to the image display device during the image display OFF state. Because of the breadth of this claim

language, in Misawa connecting the external display device to the terminal (41) signals to the CPU (48) that the external display device is in an image display ON state and disconnecting the external display device signals to the CPU (48) that the external display device is in an image display OFF state. In this regard, the CPU (48) corresponds to the display designating unit.

7. Finally, as Applicant has admitted (see above) and as previously agreed upon by the Examiner (see Non-Final Office Action), the camera switches from the normal-imaging mode to the macro-imaging mode when the external display device is connected to the output terminal (41). Therefore, when the display designating unit (CPU 48) determines that the image display device (external display device) is in the image display OFF state (i.e., not connected), the "image sensing area" corresponds to that of the normal-imaging mode where only 1/4 or 1/8 of the sensor signals are readout and kept for AE and AF processing and when the display designating unit (CPU 48) determines that the image display device (external display device) is in the image display ON state (i.e., not connected), the "image sensing area" corresponds to that of the macro-imaging mode where all or at least 1/2 of the sensor signals are readout and kept for AE and AF processing.

8. For these reasons, the rejection will be maintained. Since Applicant states, "Independent claims 8 and 15 are method and control program claims, respectively, which are analogous to the apparatus of claim 1 and, hence, are asserted as patentable for at least similar reasons", the above response is equally applicable to independent Claims 8 and 15.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. **Claims 1, 2, 5, 8, 9, 12, and 15** are rejected under 35 U.S.C. 102(e) as being anticipated by Misawa (US 6,700,607 B1).

The Examiner notes Claims 1, 8, and 15 are respective corresponding apparatus, method, and control program claims. Accordingly, they will be rejected together using the claim language of Claim 1.

11. For **Claims 1, 8, and 15**, Misawa discloses, as shown in figures 1 – 5, an image sensing apparatus, comprising:

an image sensor that outputs an image signal of a subject (28 – figure 5);

a display designating unit (CPU 48 – figure 5) that determines whether an image display device (“external image display apparatus” connected via output means 41; see column 9, lines 17 – 23) is in an image display ON state (“detector detects the connection ...”; see column 9, lines 31 and 32), or said image display device (“external image display apparatus”) is in an image display OFF state (image display ON state appears to correspond to when an image is displayed and image display OFF state appears to correspond to when an image is not displayed),

said image display device displaying an image based on said signal when said display device is in the image display ON state (see Examiner's explanation below)

a first control unit (CPU 48 – figure 5) that adjusts a focus according to a focus evaluating value based on said image signal (see column 9, lines 23 – 35 and 53 – 57, and column 10, lines 23 – 34), and

a second control unit that changes reading manners of the image signal from the said image sensor so that the image signal is read from a first image sensing including a focusing signed detecting area ("image sensing area" corresponding to the normal-imaging mode) when said display designating unit (CPU 48) determines that said image display device is in the image display OFF state (see Examiner's explanation below) and the image signal is read from a second image sensing area ("image sensing area" correspond to the macro-imaging mode) which is larger than said first image sensing area when said display designating unit determines that said image display device is in the image display ON state (see Examiner's explanation below).

The "image sensing area" can only correspond to the image signal that is transferred to the CPU (processor) for further processing. In the specification of the present application, on page 23 (line 7) – page 24 (line 18) and as shown in figures 6 and 7, the "image sensing area" corresponds to the image signals which are actually read out from the sensor and kept for processing. The signals at the top (i.e., before) and bottom (i.e., after) the reading area are swept out and discarded. Even though light impinges upon the entire image sensor, only the signals that are kept for further processing are part of the image sensing area. Similarly, in Misawa, as shown in figures 1 – 4 and as stated in column 6 (lines 35 – 41), it is only the signals which are kept that are sent for further processing.

Therefore, the size of the “image sensing area” for the “first image sensing area” and the “second image sensing area” can only be compared by using the signals that are kept for further processing. In the case of the macro-imaging mode, Misawa keeps all of the signals or at least 1/2 of the signals (via line-skipping) output from the CCD (see figures 1 and 2 and column 8, lines 28 – 44). In the case of the normal-imaging mode, Misawa keep only 1/4 or 1/8 of the signals (again via line-skipping) output from the CCD (see figures 3 and 4 and column 7, lines 55 – 64). Thus, the image sensing area in the macro-imaging mode is always larger than the image sensing area of the normal-imaging mode.

Furthermore, the claim language simply states, “a display designating unit that determines whether an image display device is in an image display ON state, or said image display device is in an image display OFF state”. As indicated in the Non-Final Office Action (mailed August 30, 2007), this claim language does not necessarily require that no power is provided/accepted to/by the display device in an image display OFF state and that power must be provided/accepted to/by the display device in an image display ON state. While the claim language requires that the image display device displays an image when the display device is in the image display ON state, the claim language does not specify what happens to the image display device during the image display OFF state. Because of the breadth of this claim language, in Misawa connecting the external display device to the terminal (41) signals to the CPU (48) that the external display device is in an image display ON state and disconnecting the external display device signals to the CPU (48) that the external display device is in an image display OFF state. In this regard, the CPU (48) corresponds to the display designating unit.

Finally, as Applicant has admitted (see above) and as previously agreed upon by the Examiner (see Non-Final Office Action), the camera switches from the normal-imaging mode to the macro-imaging mode when the external display device is connected to the output terminal (41). Therefore, when the display designating unit (CPU 48) determines that the image display device (external display device) is in the image display OFF state (i.e., not connected), the "image sensing area" corresponds to that of the normal-imaging mode where only 1/4 or 1/8 of the sensor signals are readout and kept for AE and AF processing and when the display designating unit (CPU 48) determines that the image display device (external display device) is in the image display ON state (i.e., not connected), the "image sensing area" corresponds to that of the macro-imaging mode where all or at least 1/2 of the sensor signals are readout and kept for AE and AF processing.

Misawa provides evidence of a control programs that cause the CPU (48) to control camera operations in certain ways is found in column 7 (lines 26 – 35).

12. As for **Claims 2 and 9**, Misawa discloses, as shown in figures 1 – 5, wherein said second control unit sweeps off the image signal in an entire image sensing area not including said first image sensing area at high speed when said display designating unit determines that said image display device is in the image display OFF state (see Examiner's explanation).

The "image sensing area" can only correspond to the image signal that is transferred to the CPU (processor) for further processing. In the specification of the present application, on page 23 (line 7) – page 24 (line 18) and as shown in figures 6 and 7, the "image sensing area" corresponds to the image signals which are actually read out from the sensor and kept for processing. The signals at the top (i.e., before) and bottom (i.e., after) the reading area are swept

out and discarded. Even though light impinges upon the entire image sensor, only the signals that are kept for further processing are part of the image sensing area. Similarly, in Misawa, as shown in figures 1 – 4 and as stated in column 6 (lines 35 – 41), it is only the signals which are kept that are sent for further processing.

13. As for **Claims 5 and 12**, Misawa discloses, as stated in column 9 (lines 31 and 32), that the detector (CPU 48) detects the connection to an external monitor (via Image Output 41). Furthermore, Misawa discloses, as shown in figure 5, that the image signal is passed to the external monitor (via Image Output 41) only after the Digital Signal Processing Part (34 – figure 5) has processed the image signal. Accordingly, the circuit arrangement inherently prohibits the image signal from being displayed on the external monitor prior to the completion of processing and when no connection to the external monitor exists. Furthermore, the Examiner considers “while image sensing apparatus photographs said sensed image signal” to correspond to the image signal’s passage through the entire circuit of figure 5 (i.e., from image capture to image display/storage).

Therefore, Misawa discloses a display prohibiting device (figure 5) that prohibits display of said image by said image display device (“external monitor”) at least until photographing processing is completed (Processing Part 34) if said display designating unit (CPU 48) determines that said image is displayed by said image display device while said image sensing apparatus photographs said sensed image signal.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 4, 7, 11, and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Misawa (US 6,700,607 B1).

The Examiner notes Claims 4/11 and 7/14 are respective corresponding apparatus and method claims. Accordingly, they will be rejected together, respectively.

16. As for **Claims 4 and 11**, Misawa discloses, as stated in column 7 (lines 41 and 42), “a known focusing means such as an AF sensor may also be used”; but does not necessarily specify wherein said focus evaluating value is obtained based on a high frequency component of said image signal obtained by said image sensor, as claimed.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of obtaining a focus evaluating value based on a high frequency component of an image signal obtained by an image sensor are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have obtained said focus evaluating value based on a high frequency component of said image signal obtained by said image sensor for the advantage of *performing focusing based upon fine image detail and feature edges*.

17. As for **Claims 7 and 14**, Misawa controlling the image sensing apparatus by means of a CPU (48 – figure 5); although Misawa does not specifically disclose wherein determination by said display designating unit is stored in a memory as an image display flag.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of storing information regarding image sensing apparatus operations and conditions as flags in a memory are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have designation by said display designation unit/step is stored in a memory as an image display flag for the advantage of *providing a readily upgradeable method of operation*.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Application/Control Number:
09/853,197
Art Unit: 2622

Page 12

19. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lin Ye can be reached on 571.272.7372. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Justin P. Misleh/
Examiner, GAU 2622
February 15, 2008